2016
Major Automated Information System
Annual Report

Distributed Common Ground System-Navy Increment 2 (DCGS-N Inc 2)

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Common Acronyms and Abbreviations for MAIS Programs

Acq O&M - Acquisition-Related Operations and Maintenance
ADM - Acquisition Decision Memorandum
AoA - Analysis of Alternatives
ATO - Authority To Operate
APB - Acquisition Program Baseline
BY - Base Year
CAE - Component Acquisition Executive
CDD - Capability Development Document
CPD - Capability Production Document
DAE - Defense Acquisition Executive
DoD - Department of Defense
DoDAF - DoD Architecture Framework
FD - Full Deployment
FDD - Full Deployment Decision
FY - Fiscal Year
IA - Information Assurance
IATO - Interim Authority to Operate
ICD - Initial Capability Document
IEA - Information Enterprise Architecture
IOC - Initial Operational Capability
IP - Internet Protocol
IT - Information Technology
KPP - Key Performance Parameter
$M - Millions of Dollars
MAIS - Major Automated Information System
MAIS OE - MAIS Original Estimate
MAR – MAIS Annual Report
MDA - Milestone Decision Authority
MDD - Materiel Development Decision
MILCON - Military Construction
MS - Milestone
N/A - Not Applicable
O&S - Operating and Support
OSD - Office of the Secretary of Defense
PB - President's Budget
RDT&E - Research, Development, Test, and Evaluation
SAE - Service Acquisition Executive
TBD - To Be Determined
TY - Then Year
U.S.C- United States Code
USD(AT&L) - Under Secretary of Defense for Acquisition, Technology, & Logistics

Program Information

Program Name

Distributed Common Ground System-Navy Increment 2 (DCGS-N Inc 2)

DoD Component

Navy

Responsible Office

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References

MAIS Original Estimate

This investment does not have an approved program baseline; therefore, no Original Estimate has been established.

Program Description

Distributed Common Ground System - Navy (DCGS-N) is the Navy Service component of the DoD DCGS family of systems, providing integration of Intelligence, Surveillance, Reconnaissance, and Targeting support capabilities. DCGS-N Inc 2 is the essential follow-on for the DCGS-N Inc 1 program that permits the Navy to leverage the robust sensor investments by the Intelligence Community (IC) and Services to significantly improve Battlespace Awareness and decision making.

DCGS-N Inc 2 will implement a phased strategy consisting of a series of Fleet Capability Releases that will leverage Commercial-Off-the-Shelf / Government-Off-the-Shelf tools, services, and hardware. This adaptive strategy includes on-going partnerships and collaboration with the Defense Intelligence Information Enterprise, the DCGS Family of Systems, the broader IC, and existing Joint and Navy Science and Technology efforts.

Business Case

Business Case Analysis, including the Analysis of Alternatives: DCGS-N Increment 2 capabilities will address the results of gap analysis from the Navy Maritime Domain Awareness - Data Fusion and Analysis (MFAS) ICD (dated November 18, 2010), the DCGS Enterprise ICD (dated March 10, 2009), and the DCGS-N CPD (dated September 5, 2008).

The MFAS ICD identified six capability gaps, the DCGS Enterprise ICD identified 12 capability gaps, and the DCGS-N CPD identified eight attributes specifically deferred to Increment 2. The AoA is complete.

Firm, Fixed-Price Feasibility: The MDA will approve contract type based on the independent cost estimate of satisfying the requirement and level of cost risk for the acquisition strategy.

Independent Cost Estimate: The program has not experienced a Critical Change which would induce the independent cost estimate required by 10 U.S.C.2334(a)(6). This program has not been baselined.

Certification of Business Case Alignment; Explanation: A business case for the DCGS-N Increment 2 Program has not yet been completed, thus it is premature to certify that the technical and business requirements have been reviewed and validated to ensure alignment with the business case.

Program Status

No Baseline: This Automated Information System Investment has not yet been baselined. The information provided herein is appropriate to the current status of the program. No Original Estimate baseline is being established by this report.

The MDA approved the program's Preferred Alternative and Milestone A on March 14, 2016, allowing the program to enter into the Technical Maturation and Risk Reduction phase of the Acquisition process. The Joint Requirements Oversight Council validated the program's KPPs on March 2, 2016.

Schedule

This investment does not have an approved program baseline. Therefore, the information provided here does not constitute an Original Estimate.

Memo

The DCGS-N Inc 2 ADM of March 14, 2016 approved the Preferred Alternative and Milestone A.

Performance

This investment does not have an approved program baseline. Therefore, the information provided here does not constitute an Original Estimate.

Performance Characteristics	
Development Objective/Threshold	
NR-KPP	
Support Net-Centric Military Operations: Process Collected Information and Intelligence. Measure - Time between DCGS-N Inc 2 receiving complete processable unit of data and producing processed data for further analysis or other action. Condition: High (>50 inputs per hour)	
N/A	≤ 15 minutes
Enter and be Managed in the Network: Reference SvcV-7, Consolidated Afloat Networks and Enterprise Services (CANES) CDD, DCGS-N Inc 2 IS-CDD Sustainability KPP. Networks: Secret Internet Protocol Router Network (SIPRNet), Joint Worldwide Intelligence Communications System (JWICS). Measure: Availability	
N/A	≥ 90%
Exchange Information. Measures: Timeliness, Availability.	
The following are Joint Mission Critical data sources for DCGS-N Inc 2 (reference SV-6):	
RI429 NAFTS National All Source Fusion and Tracking Service received via Sensitive Compartmented Information (SCI) Integrated Broadcast System (IBS) Broadcast on JWICS Network. Alternative Feed is SECRET IBS Over The Air Broadcast (Line 9). Measures: Timeliness, Throughput. Condition: Continuous network connectivity	
N/A	Timeliness: ≤ 10 Minutes. Throughput: ≥ 1290 Messages/minute
RI430 SCI IBS Network Feed Electronic Intelligence (ELINT), Communications Intelligence (COMINT) Externals, COMINT, Automatic Information System (AIS), Direct Threat Warning Messages received via SCI IBS Broadcast on JWICS Network. Alternative Feed is SECRET IBS Over The Air Broadcast (Line 10). Measures: Timeliness, Throughput. Condition: Continuous network connectivity	
N/A	Timeliness: ≤ 10 Minutes. Throughput: ≥ 1580 Messages
RI550 National Geospatial-Intelligence Agency (NGA) Image Servers. National, Theater, and Commercial Imagery. Requested or Subscribed. Received via Joint Concentrator Architecture (Line 117). Measures: Timeliness, Throughput. Condition: Continuous network connectivity	
N/A	Timeliness: ≤ 8 Hours. Throughput: ≥ 768 Kbps
The following are Joint mission critical system information exchange categories (reference the SV-6):	
RI538 Track Management System (Open Track Manager (OTM) - Maritime Tactical Command and Control (MTC2)) Receive Blue Forces Data and Tracks from Command and Control System. Continuous Stream from SECRET Common Operational Picture to SCI Common Intelligence Picture (Line 110). Measure: Timeliness, Throughput. Condition: Continuous network connectivity	

N/A	Timeliness: ≤ 10 Seconds. Throughput: ≥ 660 Messages/minute
	RI435 Track Management System (OTM - MTC2) Send Correlated/Fused Red, White, Gray Data and Tracks to Command and Control System. Continuous Stream from SCI Common Intelligence Picture to General Service (GENSER) Common Operational Picture (Line 14). Measure: Timeliness, Throughput. Condition: Continuous network connectivity
N/A	Timeliness: ≤ 10 Seconds. Throughput: ≥ 660 Messages/minute
	RI450/RI451/452/453/448/449/464/465 Enterprise Node and Afloat Nodes with the DCGS-N Integration Backbone (DIB) Discover and Retrieve Intelligence Products and Data from the DCGS Family of Systems and vice versa (Lines 23-26, 21-22, 37-38). Measure: Timeliness , Throughput. Condition: Continuous network connectivity
	Timeliness: ≤ 8 Hours. Throughput: ≥ 5 Mbps
	RI498/RI499/541/542 Maritime Operations Center (MOC) and Joint Task Force (JTF) (Afloat) Message Traffic. Exchange Email/Record Message Traffic via local host network with Joint Performers e.g. JTF, Joint Intelligence Operations Center (JIOC), Air Operations Center (AOC) and Navy Performers e.g. Joint Force Maritime Component Commander (JFMCC), MOC. Tasking, Intelligence Products (Lines 70-71, 112-113). Measure: Timeliness, Throughput. Condition: Continuous network connectivity
N/A	Timeliness: ≤ 1 Hour. Throughput: ≥ 5 Mbps
	Sustainment - Availability KPP. DCGS-N Inc 2 is required to have an operational availability that is high enough to allow users to rely on it being routinely usable in the planned operating environment.
N/A	Operational Availability (Ao) shall be greater than or equal to 90%.
	Training KPP. Program Office-developed, stakeholder-validated, and OPNAV-approved DCGS-N Inc 2 training solution will include curriculum development and courseware. DCGS-N Inc 2 courseware will be made available to Navy organizations (e.g. Center for Information Dominance (CID) Dam Neck, CID San Diego) via a federation for training support. Fleet Introductory Training will occur in conjunction with each DCGS-N Inc 2 installation.
N/A	Y
	Automated Fusion KPP. DCGS-N Inc 2 is required to provide the capability for Joint Director of Laboratories (JDL) Level 2 automated fusion of all-source data (including correlation) to Maritime Objects of Interest.
N/A	In less than or equal to five (5) minutes of the receipt of all-source data at the correlator, the system shall fuse it to the correct vessel (as determined by the track manager) as defined by JDL Level 2 standards, greater than or equal to 90% of the time.
	Exploitation and Detection KPP. DCGS-N Inc 2 is required to automatically process, exploit, and analyze available all-source data to extract relevant information.
N/A	The system shall automatically initiate processing, exploitation, and analysis of available all-source data to automatically detect greater than or equal to 70% of maritime objects meeting operator- or system-specified parameters and complete analysis in less than or equal to 10 minutes of receipt of unexploited available data in accordance with local Tactics, Techniques, and Procedures (TTP).
	Visual Data Display KPP. The system will provide a visual display of all available information associated with a Maritime Object of Interest within the system. Available maritime object information in the system is accessible by selecting the object.
N/A	Greater than or equal to 95% of all available information can be retrieved and displayed through interaction with the vessel's representation displayed on the map.
	ISR Collection Awareness and Management KPP. DCGS-N Inc 2 will support the automated Fleet Collection

Management (CM) process through the ingestion and visualization of collection requirements against collection opportunities. DCGS-N Inc 2 will support requests for tasking of available organic, tactical, theater, and National sensors in accordance with local protocol.	
N/A	The system shall provide the same capability currently available in DCGS-N Inc 1. The system shall support the development of a Daily Collection Plan in less than or equal to 6 hours.

Memo

1) Joint Requirements Oversight Council (JROC) validated DCGS-N Inc 2 KPPs on March 2, 2016 in JROC Memorandum (JROCM) 009-16.
2) DCGS-N Inc 2 manages requirements under the IT Box model, where the initial minimum takes the place of the traditional threshold and has no corresponding objective.

Acronyms and Abbreviations

AIS - Automatic Information System
AOC - Air Operations Command
CANES - Consolidated Afloat Networks and Enterprise Services
CID - Center for Information Dominance
CM - Collection Management
COMINT - Communications Intelligence
DIB - DCGS Integration Backbone
GENSER - General Service
JDL - Joint Director of Laboratories
JFMCC - Joint Force Maritime Component Commander
JIOC - Joint Information Operations Command
JROC - Joint Requirements Oversight Council
JROCM - Joint Requirements Oversight Council Memorandum
JTF - Joint Task Force
JWICS - Joint Worldwide Intelligence Communications System
MOC - Maritime Operation Command
MTC2 - Maritime Tactical Command and Control
NAFTS - National All Source Fusion and Tracking
NGA - National Geospatial-Intelligence Agency
OTM - Open Track Manager
SCI - Sensitive Compartmented Information
SIPRNet - Secret Internet Protocol Router Network

Funding

This investment does not have an approved program baseline. Therefore, the information provided here does not constitute an Original Estimate. The following funding data is extracted from the FY 2017 President's Budget documentation.

DCGS-N Inc 2				
Fiscal Year	**RDT&E (TY $M)**	**Procurement (TY $M)**	**MILCON (TY $M)**	**Acq O&M (TY $M)**
2016	21.4	0.0	0.0	0.0
2017	42.9	0.0	0.0	0.0
2018	36.0	0.0	0.0	0.0
2019	36.2	0.0	0.0	0.0